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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,485	09/24/2001	Noriyuki Suzuki	010507	5936
23850	7590	04/04/2005	EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW SUITE 1000 WASHINGTON, DC 20006			RONESI, VICKEY M	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/806,485

Applicant(s)

SUZUKI ET AL.

Examiner

Vickey Ronesi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-13 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 1-12 are now pending in the application.
2. The outstanding objections to the title and claims are withdrawn in light of applicant's amendment filed 1/27/2005.
3. The obviousness-type double patenting rejection over US 6,239,195 has been withdrawn in light of applicant's amendment filed 1/27/2005.
4. The terminal disclaimer filed on 1/27/2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,583,208 B1 has been reviewed and is accepted. The terminal disclaimer has been recorded. Nevertheless, it is noted that applicant has yet to establish common ownership at the time the invention was made. It is mandatory that applicant submit a statement such as, "Application X and Application Y were, at the time the invention of Application X was made, owned by Company Z." See MPEP § 706.02(l)(2), page 700-55 of revised MPEP dated May 2004.
5. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 1/27/2005. In particular, claim 9 has been amended with the limitation that the clay dispersion is added continuously or sequentially over time to the polymerizable prepolymer . This limitation was not present in the original claims. Thus, the following Office action is properly made final.
6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

***Claim Rejections - 35 USC § 102***

7. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al (WO 97/43343).

With respect to claims 1-8, 11, and 12, the rejection is adequately set forth in paragraph 8 of Office action mailed 9/27/2004 and is incorporated here by reference.

With respect to claims 9 and 10, Suzuki et al teaches that the clay dispersion and the polymerizable prepolymer are mixed by adding the clay dispersion to the monomer (i.e., polymerizable prepolymer) and then polymerizing the polymer (col. 14, lines 42-49). Adding the clay dispersion to the monomer is sequential mixing (i.e., one after the other).

In light of the above, it is clear that Suzuki et al anticipates the presently cited claims.

***Claim Rejections - 35 USC § 103***

8. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (WO 97/43343) in view of Maeda et al (JP 09-328538).

The discussion with respect Suzuki et al in paragraph 7 above is incorporated here by reference.

Pending a full English-language translation of Maeda et al, in setting forth this rejection, a machine translation has been relied upon.

Suzuki et al teaches that the clay dispersion and the polymerizable prepolymer are mixed by adding the clay dispersion to the monomer (i.e., polymerizable prepolymer) and then polymerizing the polymer (col. 14, lines 42-49) and exemplifies mixing by combining the

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ingredients all at once (i.e., not continuously or sequentially) (col. 25, lines 34-42), however, it is not opposed to other means of mixing.

Maeda et al discloses a method of producing a polyester excellent in dispersion of microparticles and teaches that this improvement is due to the step of continuously feeding the particles into an esterification reactor and esterified (abstract, claims, paragraphs 0006, 0007, and 0029).

Given that Suzuki et al is open to the use of any suitable modes of mixing the clay dispersion and the prepolymer and given the benefit of improved dispersibility by continuously feeding a microparticle as taught by Maeda et al, it would have been obvious to one of ordinary skill in the art to continuously mix the ingredients of Suzuki et al and thereby arrive at the presently cited claims.

### ***Double Patenting***

9. Claims 1 and 4-8 are directed to an invention not patentably distinct from claims 1-4 of commonly assigned U.S. Patent No. 6,583,208 B1.

The discussion is adequately set forth in paragraph 7 of Office action mailed 9/27/2004 and is incorporated here by reference.

### ***Response to Arguments***

10. Applicant's arguments filed 1/27/2005 have been fully considered but they are not persuasive. Specifically, applicant argues that the presently claimed rheological properties are only achieved by either continuously or sequentially mixing the clay dispersion and prepolymer.

It is the examiner's position that applicant has not established criticality with respect to the rheological properties. As noted in a prior Office action (paragraph 8 of Office action mailed 9/27/2004), the utilized thermoplastic polyesters in both the instant application and in the prior art exhibit comparable inherent viscosities, which is sufficient evidence to establish a basis for inherency with respect to other rheological properties.

Applicant has provided reasons (1), (2), and (3) given (pages 10 and 11 and amendment filed 1/27/2005) for why the prior art composition would not exhibit the presently claimed properties, however, these are only conclusory statements where no evidence has been provided. Such statements are given no weight absent a showing of criticality with evidence, i.e., appropriate side-by-side examples.

Further evidence to support the examiner's position regarding the lack of criticality is found in applicant's own specification on page 54, lines 31-33 states that the "method for mixing the above-described polymerizable prepolymer and the clay dispersion is not specifically limited" (emphasis added). Indeed, no preference or advantage for continuously or sequentially mixing is even recited (page 55, lines 1-17 of applicant's specification).

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### *Correspondence*


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

3/30/2005

VR



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